

The Claims

1. A method of detecting a signal component in a
5 composite signal comprising;

- 10 a) accumulating samples of the composite
signal to provide a series of frames each
containing a plurality of signal samples;
- 15 b) transforming each frame to provide
transform products in the frames;
- 15 c) analyzing each frame to determine the
number of transform products having an
amplitude above a threshold; and
- 20 d) for each frame comparing that number to a
validation range to determine if the
frame contains the signal component.

2. The method according to claim 1, further
including determining if the signal component is present
in the composite signal based on the contents of a
25 series of the individual frames.

3. The method according to claim 1, further
including detecting the presence of a predetermined
characteristic in the composite signal before the
30 operation of determining the presence of the signal
component can be performed.

5 5. The method according to claim 1, including
overlapping the frames in conjunction with transforming
each frame.

7. The method according to claim 1, wherein
comparing the number of transform products includes
15 determining if the number of transform products exceeds
the computed spectral average of the transform products
within the validation range.

25 9. The method according to claim 1, wherein the
signal component is voice in a composite signal
containing voice and non-voice components.

10. The method according to claim 1, wherein the signal component is voice in a composite signal containing voice and network tone components.

15. The system according to claim 12, wherein the processing component includes a component to window the transform of each frame.

5 16. The system according to claim 12, further including a component to detect the presence of a predetermined characteristic in the composite signal before operation of the frame validation component can be completed.

10 17. The system according to claim 12, wherein the signal component is voice in a composite signal containing voice and non-voice components.

15 18. The system according to claim 12, wherein the signal component in voice is a composite signal containing voice and network tone components.

20 19. The system according to claim 16, wherein the signal component is voice and the predetermined characteristic is utilized to determine the presence of echo in the composite signal.

25 20. A program storage device readable by a machine embodying a program of instructions executable by the machine to detect a signal component in a composite signal, the instructions comprising:

- 30 a) accumulating a number of samples of the composite signal to provide a series of frames each containing a plurality of signal samples;

- ```

 b) transforming each frame to provide
 transform products in the frames;

 c) analyzing each frame to determine the
5 number of transform products having an
 amplitude above a threshold; and

 d) for each frame comparing that number to a
 validation range to determine if the
10 frame contains the signal component.

```